ABSTRACT OF THE DISCLOSURE

A non-linear region controller 45 calculates a standard yaw rate from an actual steering angle θr of steerable wheels detected by a steering angle sensor 10, a

5 deviation from the standard yaw rate, of a yaw rate γr detected by a yaw rate sensor 23, and a rate of change of the yaw rate deviation. Based upon calculated results, the non-linear region controller 45 determines whether tires of a traveling vehicle are in a non-linear region of tire characteristic, and if determining so, exercises a steering amount reduction control to reduce an actual steering angle θr of the steerable wheels. The

10 determination of linearity of tire characteristic can be made with comparative ease utilizing a commonly available sensor, and the vehicle is controlled using the determination result.